Endovascular Treatment of Hepatic Artery Pseudoaneurysm after Pancreaticoduodenectomy

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I have the following potential conflicts of interest to report:

☐ Consulting
☐ Employment in industry
☐ Stockholder of a healthcare company
☐ Owner of a healthcare company
☐ Other(s)

✓ I do not have any potential conflict of interest
Introduction / Case Report

- Pancreatectomy one of the causes of pseudoaneurysm
  - Pancreatic/intestinal leakage from anastomotic failure
  - In situ infection

...main cause of postpancreatectomy hemorrhage!
...mortality rates of 16-50%
...Treatment regardless the size

- 77-year-old male
- **Comorbidities:** AHT; Chronic bronchitis; BPH

- Pancreaticoduodenectomy (PD) for serous cystadenoma of the pancreas
- 2 months post-PD → Hemorrhagic shock caused by gastrointestinal hemorrhage
Case Report

**COMPUTED TOMOGRAPHY ANGIOGRAPHY (CTA)**

- Aneurysmal dilatation of the hepatic artery (HA) bifurcation (15x9mm)
- Large perianastomotic fluid collection (percutaneously punctured – isolation of *Klebsiella pneumoniae*)
ENDOVASCULAR TREATMENT

. Access through the right common femoral artery with an 7F introducer sheath

. Celiac trunk’s catheterization and introduction of a guiding sheath

. Catheterization of the common, proper and right hepatic arteries

. Selective angiography – pseudoaneurysm of the hepatic artery bifurcation

. Coil embolization (Cook Nester® coil 4mm) of the left hepatic artery

. Stent-graft deployment (Gore Viabahn® 5x50mm) between the common and the right hepatic arteries

. Control angiography
Case report / Conclusion

CONTROL CTA

- Complete exclusion of the pseudoaneurysm
- Maintenance of the hepatopetal arterial flow

- Gastrointestinal bleeding is a potentially devastating complication after pancreaticoduodenectomy
- There is no consensus regarding the best surgical treatment
- Minimally invasive endovascular therapies are increasingly proving to be a safe and efficacious alternative to surgical intervention